HA S

TEXAS DEPARTMENT OF LICENSING AND REGULATION

Compliance Division/Boiler Program
P. O. Box 12157 • Austin, Texas 78711 • (512) 539-5716 • Fax (512) 539-5687
Email Address: boilers@tdlr.texas.gov Web site: www.tdlr.texas.gov

AIA Procedure 9 Rev 7

EFFECTIVE DATES OF BOILER LAW AND RULES

Page 1 of 19

a. Purpose

1. The purpose of this procedure is to provide general guidelines in determining the effective dates of various Texas Boiler Law and Rules, and thereby ensures uniformity in enforcement by all Inspectors.

b. Scope

0. In June, 1937, the Texas Boiler Law (TCS-5221c) was enacted by the 45th Legislature. Since that time, many revisions to the original document have occurred. This procedure will detail the major changes by date as they occurred. It should be noted that some specific requirements were mandated through reference to the applicable ASME Codes in effect at that time. Any question regarding effective dates should be submitted directly to the Inspector's Supervisor.

c. Description

- 1. <u>June 3, 1937</u> Fired power boilers and pressure vessels producing steam over 15 psi are encompassed by the law. ASME Code construction and installation is mandated. The first and second official rules (referenced to as "orders") are not available; however, 1937 ASME Sect. I is on file in the Austin office.
- 1. October 1, 1941 Third official order of the rules and regulations are printed in booklet format. "Rule 26" is adopted, which describes minimum foundation and level requirements. Unfired vessels used for generating steam in excess of 15 psi are also encompassed.
- 2. <u>September 1, 1942</u> Fourth official order of the rules and regulations is issued as an addenda to the 1941 Edition. This order specified rules for the use of patch plates and blowoff piping.
- 3. <u>June 22, 1944</u> Fifth official order of the rules and regulations is issued as an addenda to 1941 Edition. This order described rules for payment of operation fees, Inspectors examination requirements, and mandates the use of water glass drains. Additionally, this order mandated that the Commissioner authorize persons setting and sealing safety valves, and mandated try-levers on safety valves.

- 5. <u>May 10, 1951</u> Sixth official order of the Boiler Law Rules and Regulations issued and incorporated as addenda the fourth and fifth official orders. Specific exemptions are given as follows:
 - A. boilers under federal control and stationary boilers at round houses, pumping stations and depots of railway companies under the supervision or inspection of the Superintendent of Motive Power of such railway companies;
 - B. boilers on which the pressure does not exceed fifteen (15) pounds per square inch;
 - C. automobile boilers and boilers on road motor vehicles;
 - D. boilers used exclusively for agricultural purposes;
 - E. boilers for heating in buildings occupied solely for residence purposes with accommodations not to exceed four (4) families;
 - F. boilers used for cotton gins.
- 6. August 1, 1958 Seventh official order of the rules and regulations is issued. This edition was a virtual rewrite of the existing format and technical information. The major revisions issued with this order are as follows:
 - A. low pressure steam heating boilers installed in public and private schools, colleges, universities, or county courthouses are encompassed by the rules and regulations. ASME Code construction and installation is mandated.
 - B. specific rules are issued for electric steam generators.
 - C. low water fuel cutoffs are mandated on all boilers not having constant attendance.
 - D. specifically mandated repairs being subject to the acceptance of the Inspector.
 - E. weighted lever safety valves and safety valves having discs or seats of cast iron are prohibited.
 - F. assigned a 30 year age limit to lap seam riveted non-Code boilers operating in excess of 50 psi.

- 7. May 30, 1959 Addenda to seventh official order is issued. This addenda added the term "low pressure heating boilers defined as a boiler operated at pressures not exceeding 15 lbs per sq. in. gage steam or at pressures not exceeding 160 lbs per sq. in. gage and temperatures not exceeding 250°F for water. This encompassed hot water heating boilers with the same application and exemptions as for steam heating boilers (Sec 3.6.1 above).
- 8. <u>August 23, 1963</u> Eight official order of the rules and regulations is published as an addenda to the 1959 edition. This order adopted Sec. 4a in the Boiler Law, allowing extensions of inspection intervals for power boilers.
- 9. <u>June 17, 1965</u> Ninth official order of the boiler law is issued as an addenda to the 1958 edition. As of this date, all power and low pressure heating boilers (steam and hot water) are encompassed by the law. The following boilers and low pressure heating boilers were exempted from the provision of the act:
 - A. boilers under federal control and stationery boilers at round houses, pumping stations and depots of railway companies under the supervision or inspection of the superintendent of motive power of such railway companies.
 - B. automobile boilers and boilers on road vehicles.
 - C. The following boilers and low pressure heating boilers were exempted from the requirements of Sections 4 (Inspections, repairs, hearing and temporary certificate) Section 5 (Inspection by third party) Section 11 (Reports of inspection) and Section 12 (Fees):
 - i low pressure heating boilers for heating in buildings occupied solely for residence purposes with accommodations not to exceed four (4) families;
 - ii boilers and low pressure heating boilers located on farms and used exclusively for agriculture purposes;
 - iii boilers and low pressure heating boilers used for cotton gins.
- 10. <u>June 6, 1968</u> Tenth official order of the Boiler Law, Rules and Regulations is published. The major revisions appearing in this order are as follows:

- A. age limit assigned to all nonstandard boilers (non lap seam riveted);
- B. miniature boilers are incorporated into requirements for power boilers;
- C. low water fuel cutoffs are mandated for hot water heating boilers not under continuous attendance.
 - i Expansion tanks on systems above 50 psi must be constructed and stamped in accordance with ASME Code Section VIII, Div. 1 (mandated by reference).
- D. Flammable materials, trash, and leaks in boiler room roof are specifically prohibited.
- 11. October 10, 1969 An addenda to the Tenth official order was issued. The addenda added rules for special inspections; and provided for higher boiler inspection fees.
- 12. <u>June 1, 1972</u> Eleventh official order is issued. The major revisions and additions appearing in this order are as follows:
 - A. hot water supply boilers are added to the scope of the Law, with the same limitations and exemptions currently enforced;
 - B. a definition of a competent attendant is included;
 - C. all boilers (except cast iron) must hereafter be registered with the National Board.
- 13. <u>August 1, 1977</u> (No official order). This edition completely revised the Texas Boiler Law, Rules and Regulations format and technical content. The major revisions included in this edition are as follows:
 - A. nuclear boilers are encompassed by the Law. ASME Code construction and installation are mandated;
 - B. specific rules for high temperature water boilers are added;
 - C. specific rules for unfired steam boilers are added. ASME Section VIII Div. 1 construction and installation is mandated;

- D. the term "potable water heater" is added and specific rules are given;.
- E. flow sensing devices are accepted for use on water tube or coil type boilers requiring forced circulation;
- F. a rule change is initiated, mandating expansion tanks to be built in accordance with ASME VIII Div. 1 when installed in heating systems over 30 psi;
- G. specific rules are added addressing clearances on all sides of the boilers. (two feet on all sides, four feet on top).
- 14. October 17, 1977 Provisions were adopted stating that all exit doors shall open outward and two or more exits remote from each other should be provided.
- 15. <u>May 13, 1982</u> Provisions were adopted to require Repair and Alteration Report forms. All repairs and alterations to boilers must be reported to the department within 90 days following the repair or alteration.
- 16. <u>June 25, 1982</u> Provisions for low-water fuel cut-off and water feeding devices were amended to allow the use of probe-type low-water fuel cut-offs. When a low-water fuel cut-off and feedwater pump control are combined in a single device, an additional separate low-water fuel cut-off shall be installed. The additional control shall be wired in series electrically with the existing low-water fuel cut-off.
- *17.* August 17, 1983 - Provisions for safety relief valves were amended to distinguish the requirements for hot water heating boilers, lined potable water heaters, and hot water supply boilers. The relief valve shall equal or exceed the Btu output of the hot water heating boiler. Lined potable water heaters shall have at least one pressure temperature relief valve of the automatic reseating type set to relieve at or below the MAWP of the heater with a capacity equal to or exceeding the rated burner Btu input of the heater. Hot water supply boilers of the forced circulation type shall be equipped with a pressure relief valve set at a pressure not exceeding the MAWP of the boiler. It is recommended that where a hot water storage tank is installed in the system, it should be equipped with a pressure and temperature relief valve with a pressure setting not exceeding maximum allowable working pressure of the boiler. This pressure and temperature relief should be rated on the basis of the burner input to the boiler with an ASME Btu relieving capacity equal to or exceeding the rated burner Btu input.

- 18. February 10, 1984 Provisions for bottom blowoff or drain valve were amended to exempt boilers having a capacity of 25 gallons or less from these requirements. A note was added to determine the discharge capacity of safety relief valves in terms of Btu, the relieving capacity in lbs. of steam/hr. is multiplied by 1,000. The minimum size of the drain piping, valves, and cocks shall be 3/4 inches. The discharge piping shall be full size to the point of discharge. When the blowoff connection is located at the lowest water containing space, a separate drain connection is not required. The minimum pressure rating of valves and cocks shall be at least equal to the pressure stamped on the boiler, but in no case less than 30 psi. The temperature rating shall not be less than 250° F.
- 19. <u>July 19, 1984</u> (Emergency was effective 2/17/84 through 6/16/84)
 Provisions regarding boiler accidents were amended to describe that
 the owner/user shall immediately notify the Chief Inspector and
 Authorized Inspector. The owner/user shall provide the Chief
 Inspector and Authorized Inspector with free access, fragments,
 parts, appurtenances, documents, and records necessary to conduct
 an investigation of the accident. The Authorized Inspector shall
 submit a report to the Chief Inspector and the Chief Inspector shall
 file a final report for the boiler accident.
- 20. <u>September 14, 1984</u> (Emergency was effective 2/17/84 through 6/16/84) Provisions for fees were amended to increase the cost of a boiler Certificate of Operation from \$5 to \$10.
- 21. October 8, 1985 Provisions for authority to set and seal safety appliances were amended to describe the TVR symbol stamp and Certificate of Authorization from the department as an alternative to the Commissioner granting authorization granted upon proof of competency. (REPEALED)
- 22. October 25, 1985 Provisions for fees collected from special inspection were amended to require that a prepayment of \$500 shall be received at least five working days before the department can initiate the requested special inspection.
- 23. October 1, 1986 (Emergency was effective 9/10/86 through 9/30/86)
 Provisions for fees collected for special inspection were increased to \$250 for four hours or less and to \$400 for greater than four hours

- and including eight hours. The prepayment for requested special inspection was increased to \$600.
- 24. March 1, 1987 Provisions were amended regarding fees for inspection of boilers. The inspection fees for all boilers other than heating boilers shall be: those with a heating surface of 50 sq. ft. or less \$60; those with a heating surface greater than 50 sq. ft. but not greater than 100 sq. ft. \$70; those with a heating surface greater than 100 sq. ft. but not greater than 500 sq. ft. \$85; those with a heating surface greater than 500 sq. ft. but not greater than 1,500 sq. ft. \$100; those with a heating surface greater than 1,500 sq. ft. \$140. The inspection fees for heating boilers shall be: those without a manhole \$60; those with a manhole \$90.
- 25. <u>March 1, 1987</u> Provisions for fees charged by the department for a boiler Certificate of Operation were increased from a \$10 to a \$15 payment.
- 26. <u>April 27, 1987</u> Provisions for unfired steam boilers were amended to describe construction in accordance with ASME Section I or Section VIII, Division 1.
- 27. <u>June 10, 1987</u> Provisions for implementing the Texas Boiler Law requirements for nuclear boilers were amended to describe the department's role in the inservice inspection activities of nuclear boilers; the necessary guidelines for the owner/user to follow to obtain a Texas boiler number and Certificate of Operation; submittal of the inservice plan; and verifications by the department.
- 28. <u>July 7, 1987</u> Previous requirements for stamping numbers on boilers were repealed and reissued as "Assignment of Boiler Numbers and Identification", Rule 65.17 as follows:
 - A. Texas boiler numbers shall be issued as a decal to all Authorized Inspection Agencies and Deputy Inspectors as requested in writing. Only numbers issued by the Chief Inspector shall be assigned to boilers. Only the official decal and corrosion-resistant metal tags supplied by the Chief Inspector may be used. Only one Texas boiler number shall be assigned to a boiler. Reassignment of Texas boiler numbers shall be made only with the approval of the Chief Inspector;
 - B. during the first inspection of all boilers, the Inspector shall stamp, except as provided for in 3.25.3 below, the Texas boiler number as near to the original American Society of Mechanical

Engineers (ASME) Code symbol stamping and required information as practicable. The stamping shall consist of the letters "TX" and directly below the "TX" shall be stamped the Texas boiler number with a five point star stamped immediately adjacent to the first and last digit of the Texas boiler number. All stamping shall be accomplished by low stress steel dies 5/16 inch high. In addition, the corrosion-resistant metal tag shall be applied, as permanently as practicable, to the external jacket or other covering where the surface temperature exceeds 200 degrees F, or the Texas boiler number decal shall be applied where the surface does not exceed 200 degrees F. The tag or decal shall be located on the boiler so that identification is easily obtained from the most accessible operating control side or information label side:

- C. lined water heaters ASME Code symbol stamped "HLW", cast iron sectional boilers, water tube boilers with cast headers and other types of boilers that will be damaged by direct impression stamping are exempt from the stamping requirements of 3.25.2 above. These boilers shall be identified with the Texas boiler number decal or corrosion-resistant tag as described in 3.25.2 above;
- D. the Texas boiler number or other boiler identifying numbers shall not be concealed by lagging or paint;
- E. no person except the Chief or Deputy Inspector shall deface or remove such numbers, except as approved by the Chief Inspector.
- 29. January 18, 1988 - Provisions for registration of a boiler added requirements that the Authorized Inspection Agency will register the boiler within 30 days of the owner or users notification. If there is no Authorized Inspection Agency, the owner or user shall notify the Texas Department of Labor and Standards. The Chief Inspector will, within three working days of notification, remit a request for temporary operating permit. The Chief Inspector shall, within five working days of receipt of the completed request for temporary operating permit, respond to the owner or user and Deputy Inspector. The Deputy Inspector shall, within 30 days of receipt of the approved request, register the boiler. The application for certification (registration) is defined as the completed First Inspection Report. The Authorized or Deputy Inspector shall file the application with the Commissioner within 30 days of the inspection. Before the certification can be approved the department must

- receive and accept the completed application and appropriate certificate/inspection fee.
- 30. March 3, 1988 Provisions for registration of a boiler were added that applicants may appeal any dispute arising from a violation of the time periods set for processing an application. An appeal is perfected by filing with the Commissioner of the department a letter explaining the time period dispute. The letter of appeal must be received by the Commissioner no later than 20 days after the dispute arose. The Legal Division will decide the appeal within 20 days of the receipt of the letter of appeal by the Commissioner.
- 31. <u>September 5, 1988</u> Provisions for low-water fuel cutoffs and water feeding devices were changed to describe that a coil-type boiler or a water-tube boiler requiring forced circulation to prevent overheating of the coils or tubes shall have a device which is listed by a nationally recognized testing agency to prevent burner operation at a flow rate inadequate to protect the boiler unit against overheating.
- 32. <u>September 5, 1998</u> Provisions for safety valves and safety relief valves for electric boilers which require two or more safety valves were changed from 500 kilowatts to more than 1100 kilowatts.
- <u>September 5, 1998</u> Previous requirements for water level indicators 33. were repealed and reissued to describe that forced-flow steam generators with no fixed steam and water line and high temperature water boilers of the forced circulation type that have no steam and waterline are an exception to the rule. Provisions for installations where the water gage glass(es) are not visible from the boiler operating floor were changed to describe that where direct visual observations of the water gage glass(es) cannot be made, two remote level indicators shall be provided at operational level. Provisions were added for two independent remote level indicators instead of one of the two required gage glasses for boiler drum water level indication for boilers with all drum safety valves set at or above 900 psi. When both remote level indicators are in reliable operation, the remaining gage glass may be shut off, but shall be maintained in serviceable condition. Connections from the boiler to remote level indicators shall be at least 3/4 inch pipe size to, and including the isolation valve, and at least 1/2 inch OD tubing from the isolation valve to the remote level indicator. These connections shall be completely independent of other connections.
- 34. <u>June 9, 1989</u> (Emergency Adoption)

 <u>November 15,1989</u> (Regular Adoption) The agency determined a need for a standard numbering system.

Therefore, Sections 65.1 through 65.100 were renumbered and reorganized as the November 15, 1989 publication of the BOILER RULES.

- 35. <u>September 1, 1989</u> The Boiler Law under Texas Civil Statutes, Article 5221c was replaced by Acts 1989, 71st Legislature. The Law reestablished under the Health and Safety Code, Chapter 755.
- 36. January 3, 1992 (Effective Date)

 July 1, 1992 (Mandatory Date after grace period as recommended by the Board of Boiler Rules) Section 65.20 regarding the authority to set and seal safety appliances was revised. All safety and safety relief valves for ASME Sections I, IV, and VIII Division 1 boilers must be repaired, tested, set, and sealed by one of the following provided the scope of the issued certificate of authorization covers the work to be performed:
 - A. an organization holding a valid V, HV, or UV certificate of authorization, as appropriate, issued by the American Society of Mechanical Engineers (ASME); or
 - B. an organization holding a valid VR certificate of authorization issued by the National Board of Boiler and Pressure Vessel Inspectors; or
 - C. an organization holding a valid owner/operator certificate of authorization issued by the department. Such authorization may be granted or withheld by the commissioner.
- 37. January 3, 1992 (Effective Date)

July 1, 1992 (Mandatory Date after grace period as recommended by the Board of Boiler Rules) - Section 65.100 regarding repairs and alterations to boilers was revised. Repairs and alterations shall conform to the requirements of the National Board Inspection Code (NBIC) 1989 edition; and shall be acceptable to the inspector, except that repairs and alterations may be performed by the following provided the intended work is within the scope of the issued certificate of authorization:

A. holders of the appropriate certificate(s) of authorization from the American Society of Mechanical Engineers; or holders of a certificate of authorization from the National Board of Boiler and Pressure Vessel Inspectors for use

of the R repair symbol stamp; or owner/operators of boilers who have been issued a certificate of authorization by the Texas Department of Licensing and Regulation.

- 38. October 20, 1992 Rules for interagency reporting by Deputy Fire Marshals under the State Board of Insurance and by inspectors under the Department of Health for unregistered or unsafe boilers were enacted. The department shall provide boiler rules, training, and forms to identify unregistered or unsafe boilers.
- 39. October 20, 1992 Portable or stationary non-standard boilers shall be identified as "TEXAS SPECIAL" or "TX SPCL". Shipment of portable or stationary non-standard boilers into this state is prohibited unless application has been made for approval as a portable or stationary non-standard boiler used for exhibition, instruction, education, show, display, or demonstration. Portable or non-stationary boilers shall be prepared for inspection with the following additional requirements:
 - A. external lagging and insulation shall be removed for the first inspection and at five year intervals for the subsequent inspections;
 - B. ultrasonic thickness measurements or other examinations as required by the chief inspector or deputy inspector shall be performed to determine the condition of the boiler;
 - C. any other inspections or examinations shall be performed as determined by the chief inspector as a condition for registration.
- 40. October 20, 1992 Rules for safety valves on heating boilers were revised to require a body drain connection below seat level. For valves exceeding 2 inch pipe size, the drain holes or holes shall be tapped not less than 3/8 inch pipe size. For valves 2 inch pipe size or less, the drain hole shall not be less than 1/4 inch pipe size. Also, the minimum valve capacity in pounds per hour shall be the greater of that determined by dividing the maximum Btu output at the boiler nozzle obtained by the firing of any fuel for which the unit is installed by 1000, or shall be determined on the basis of the pounds of steam generated per hour per square foot of boiler heating surface as given on the table.
- 41. October 20, 1992 Rules for water level indicators for power boilers were revised to delete the three or more gage cocks within the

- visible length of single water glass installations located on the same horizontal line.
- 42. April 19, 1994 New Rule Section 65.65 was added to define the purpose, method of reporting, and reimbursement of expenses for the Board of Boiler Rules. Rule revisions to Section 65.20(b)(1), 65.20(c)(1)(A) and 65.70(a)(3) clarified the time requirement for a boiler inspection; Section 65.50(b)(1) allowed for the acceptance of certain data to be electronically transmitted from authorized inspection agencies to our department; Section 65.70(f)(2) deleted potable water heaters as being exempt from the 2 foot side clearance requirement for all boilers; Section 65.80(a)(1) provided for a boiler Certificate of Operation fee increase for boiler inspections performed by an authorized inspection agency inspector; Section 65.80(c)(2) clarified the Texas Commission late renewal fee.
- 43. <u>August 28, 1995</u> The Boiler Law, Section 755.022 was amended by Acts 1995, 74th Legislature to exempt certain miniature hobby boilers from registration and certification requirements.
- 44. October 1, 1995 The Boiler Rules were amended regarding fees for boiler inspections. Inspections performed by Authorized Inspection Agencies \$40. Inspections conducted by Deputy Inspectors are as follows: those boilers with a heating surface of 50 square feet or less \$80; greater than 50 square feet but less than 100 square feet \$90; greater than 100 square feet but less than 500 square feet \$105; greater than 500 square feet but less than 1,500 square feet \$120; greater than 1,500 square feet \$160; heating boilers without manholes \$80; and those with manholes \$110.
- 45. October 1, 1995 The Boiler Rules were amended regarding the API exam administration fee. The fee was increased from \$25 to \$50.
- 46. <u>August 1, 1996</u> Provisions were adopted to require registration of boiler installers. Any person, firm, or corporation who installs boilers and appurtenances within the state shall be registered with the department.
 - A. Provisions were adopted regarding fees for boiler installers as follows: new registration \$30; registration renewal \$30; registration reinstatement \$30; and revision to a registration \$30.

- B. Provisions were adopted regarding the requirement for the boiler installer to file a report of installation with TDLR within 30 days of the installation.
- 47. September 1, 1997 The Boiler Law, Section 755.026 was amended by the 75th Legislature to authorize the interval between internal inspections of power boiler to be extended to a period not exceeding a total of 48, rather than 24 months and unfired steam boilers to be extended to the next scheduled downtime of the boilers, but not exceeding a total of 84 months, rather than 60 months. The Section is also amended to require the certificate inspection of gas fired boilers to include inspection of the gas regulator and/or pressure reducing valve servicing the boiler to verify proper venting to a safe point of discharge.
- 48. March 1, 1998 Section 65.20(a)(1)&(2) clarifies the intent by defining the responsibility of inspection by insurance inspection agencies and the state. Section 65.60(b)(2)(F) provides for a mandatory indoctrination for inservice boiler inspectors prior to issuance of a commission. Section 65.80(a)(2)(A) provides for a change in power boiler inspection fees due to a change in the ASME Boiler and Pressure Vessel Code, Section 1 regarding a change from the usage of boiler heating surface to capacity in establishing the system design of a boiler. Previous power boiler fees were based on heating surface.
- April 13, 1999 Section 65.20 (c)(3)(B) allows functional processing *4*9. of boiler installer applications by the Department. Section 65.50 (b)(1)&(2) clarifies the time frame for notification to the chief inspector by insurance companies of boiler risks written, canceled, or not renewed and boiler risks rejected or suspended due to unsafe conditions. Section 65.50(c) provides for the submission of inspection reports to the department by manual or electronic means. Section 65.100(e) provides requirements for atmospheric vents, gas vents, bleed or relief lines on gas regulation or reducing valves for gas fired boilers applying for extensions to the required internal inspection interval. Section 65.100(I)(3)(C) reflects changes in ASME Section I, PG-60.1.1 which states "Two independent remote level indicators may be provided instead of one of the two required gage glasses for boiler drum water level indication in the case of power boilers with all drum safety valves set at or above 400 psi (2800 kPa)." Section 65.100(k) updates the National Board Inspection Code to the 1995 edition latest Addenda.
- 50. <u>July 20,1999</u> Section 65.10 renumbered definitions. Section 65.20(c)(3)(B&C) & 65.50(d) changed wording to "Chief Inspector".

Section 65.20(e)(1)(A) corrected the referenced Section 755.026 of the Law. Section 65.20(h)(3)(J)(l) deleted "posting, and dating changes in parts", which is no longer applicable.

51. September 1,1999 – Boiler Law

A. Section 755.001 DEFINITIONS:

- i. "Boiler" is changed to add "a process steam generator".
- ii. "Certificate inspection" is changed to add the wording "the required internal or external".
- iii. "Internal inspection is changed to add the wording "waterside and fireside areas".
- iv. "Potable water heater" is added. "Power boiler" is changed to add the wording "for a purpose external to the boiler".
- v. "Process steam generator" is added.
- vi. "Safety appliance" is changed to delete the wording "(within the jurisdictional limits of the boiler as prescribed by the Commissioner)".
- vii. "Standard boiler" is changed by deleting the wording "such as the American Society of Mechanical Engineers".
- viii. "Unfired steam boiler" is changed by adding the wording "an unfired pressure vessel in which steam is generated. The term does not include:" and deleting the wording "steam generating system that includes:". The wording "vessels known as" in paragraph (A) is added before the word "evaporators".
- B. Section 755.022(a(2) & (4) in paragraph (2), the wording "process steam generators" replaces "unfired steam boilers" and "collection or liberation" is added. A new paragraph (4) is added.
- C. Section 755.025(a) & (b) in paragraph (a), the wording "at the time of initial installation and at subsequent intervals" is added. In paragraph (b), the wording "unfired steam boilers, and steam collection or liberation drums of process steam generators" is added.

- D. Section 755.026(a) the wording "steam collection or liberation drums of process steam generators" is added.
- E. Section 755.027(a) the wording "in the manner specified by the department" replaces "(1) the condition of the boiler; (2) the location of the boiler; (3) the date of the inspection; and (4) the name of the inspector".
- F. Section 755.029(a) the paragraph is reformatted and wording "the owner or operator has paid the fees assessed under Section 755.030." is added.
- G. Section 755.(b)(c)(d) the wording in paragraph (b) is deleted "The commissioner may adopt rules establishing inspection procedures for the use of nondestructive examination equipment to comply with the inspection requirements under Section 755.025." Paragraph (c) becomes (b) and the wording "or their appurtenances" is added. Paragraph (d) becomes (c) and the wording "or any appurtenances on the boiler" is added.
- 52. <u>January 30, 2000</u> Section 65.1 changes the authority statement to include Chapter 51 of the Texas Occupations Code which authorizes the Texas Commission of Licensing and Regulation to promulgate and enforce a code of rules and take all action necessary to assure compliance with the intent and purposes of the statutes and Code chapters assigned to the Department. Section 65.80 increased the fee for a Certificate of Operation from \$40 to \$45, and the inspection fee for all boilers other than heating boilers from \$110 to \$115. It also deleted the \$12 fee for obtaining a copy of the Boiler Law and Rules. Section 65.90 added language that clarifies the authority to impose sanctions and administrative penalties. Section 65.100 (f)(3) corrected the reference from subsection (h)(3)(D) to (i)(3)(D).
- 53. <u>April 18, 2000</u> Section 65.80 increased the inspection fees for heating boilers for those without a manhole from \$80 to \$85 and those with a manhole from \$110 to \$115.
- 54. <u>March 27, 2002</u> Rule 65.10 Definitions added process steam generator as boiler, clarified certificate inspection, removed installer, clarified internal inspection, defined process steam generator and revised unfired steam boiler. The section was renumbered as necessary to reflect changes.
 - A. Rule 65.20 Licensing/Certification/Registration requirements revised to delete requirement for installer registration.
 - B. Rule 65.80 Fees revised to delete fee for Boiler Installer

Registration and API Examination.

- 55. <u>June 9, 2002</u> Rule 65.100, Technical requirement was repealed and republished for adoption. The most significant changes were as follows:
 - A. consolidated technical requirements for each boiler type;
 - B added requirements for process steam generators;
 - C. mandated current edition and addenda of the National Board Inspection code (NBIC); and
 - D. clarified requirements for Inservice hydrostatic tests.
- 56. <u>December 5, 2005</u> Metric conversions were added throughout the Boiler Rules.
 - A. Rule 65.10 Definitions added boiler external piping, modular boiler, multiple pressure steam generator and nominal. This section was renumbered as necessary to reflect changes.
 - B. Rule 65.20 Licensing/Certification/Registration Requirements (h) and (i) were relocated to 65.100 Technical requirements. This section was re-lettered as necessary to reflect changes.
 - C. Rule 65.50 Reporting Requirements was revised to clarify who is responsible for filing the repair and alteration report form with the department.
 - D. Rule 65.60 Responsibilities of the Department (e) and (f) were relocated to 65.100 Technical Requirements. This section was relettered as necessary to reflect changes.
 - E. Rule 65.70 Responsibilities of the Licensee/Certificate Holder. This section was re-lettered as necessary to reflect changes.
 - i (f)(2) removed mandated top and side boiler clearance requirements and replaced with the manufacturer's recommended side clearances.
 - ii (i) added to reflect requirements for re-stamping and nameplate replacement.
 - iii (j) added to clarify the requirements for "HLW" stamped boilers with reference to hot water heating systems.

- iv (k) added to reflect new requirements for modular boiler installations.
- v (I) added to reflect and clarify the requirements for multiple pressure steam generators.
- vi (m) added to reflect and clarify the requirements for stacked boiler installations.
- F. Rule 65.100 Technical Requirements.
 This section was re-lettered as necessary to reflect changes.
 - i added newly relocated sections (a)(1), (a)(2), (b)(1), (b)(2) and (o).
 - ii (e)(4) and (5) reworded to more accurately reflect the requirements of the ASME Code, Section I, Part PEB.
 - iii (e)(7) added to clarify the requirements for the internal inspection of electric boilers.
 - iv (f) added to clarify requirements pertaining to extensions.
 - v (g)(6)(C) added to clarify requirements for "double block and bleed" and possible entry.
 - vi (g)(8) added to reflect requirements for boiler external piping for power boilers.
 - vii (h)(8)(C) added to state entry requirements for unfired steam boilers.
 - viii (i)(9)(C) added to state entry requirements for process steam generators.
 - ix (j) new location.
 - x (k) added to separate the different types of heating boilers and to relocate and clarify the technical requirements associated with each type of boiler. (Tables become new Exhibit 2)
 - xi (n) added the words "pressure", "addenda" and language to more clearly reflect NBIC and jurisdictional requirements.

AIA Procedure 9 Rev 6

- xii (o) new location.
- 57. <u>September 1, 2006</u> The amendments make technical changes and clarifications.
 - A. Rule 65.10 The definition of "Preliminary Order" is amended to clarify that a repair requirement form signed by the Department's Chief Boiler Inspector or a Deputy Inspector is considered a preliminary order. A repair requirement form is the Department form that is used to notify boiler owners and operators of needed repairs or alterations. The purpose of the amendment is to make clear that a repair requirement form signed by a Department inspector constitutes a preliminary order that is required to be issued to the boiler owner or operator by the Texas Health and Safety Code, Section 755.041(a). This amendment brings the rule language more in line with Department procedure.
 - B. Rule 65.70 Responsibilities of the Licensee/Certificate Holder/Registrant.
 - i The amendments to 65.70(f)(2) remove references to "side" clearances. This change clarifies that all minimum manufacturer's recommended clearances for boilers must be maintained, including top and bottom clearances.
 - ii The amendments to 65.70(h)(3)(A) and (B) bring the rules more in line with requirements of the National Board Inspection Code (NBIC). Currently the Department is requiring ultrasonic thickness measurements of each inspection of a nonstandard boiler, under the authority of 65.70(h)(c)(B). However, the Department believes that requiring such an examination only for the first inspection of a nonstandard boiler and at five-year intervals thereafter is sufficient to protect the public safety.
 - C. Rule 65.100 Technical Requirements
 - i The amendments to 65.100(k)(2)(G)(ii) change the specifications for hydrostatic test pressure for hot water heating boilers.
 - ii The amendments to 65.100(k)(4)(D) add specifications for pressure gages for certain potable water heaters.

These changes make the rules more consistent with requirements of the ASME Code.

- 58. <u>June 15, 2015</u> Complete rewrite of the Texas Boiler Administrative Rules
 Chapter 65 to conform to other TDLR program rules
 formatting. Highlights include:
 - A. New definitions for:
 - i. Application for Certification
 - ii. Authorized Inspection Agency (In-service)
 - iii. Authorized Inspection Agency (New Construction--ASME Activities)
 - iv. Allowable Working Pressure
 - v. Changeover Valve
 - vi. Competent Attendant
 - vii. Disconnected Boiler
 - viii. Electrode Type Boiler
 - ix. Heat Recovery Steam Generator
 - x. Immersion Resistance Element Type Boiler
 - xi. Install
 - xii. Installation
 - xiii. Maximum Allowable Working Pressure
 - xiv. Non-Code Boiler
 - xv. Person
 - xvi. Pool Heater
 - xvii. Preliminary Order
 - xviii. Serious Accident
 - xix. Stacked Boiler
 - xx. System Pressure
 - xxi. Texas Commission
 - B. 65.10/65.11 New requirements added for registration/renewal of Authorized Inspection Agencies
 - C. 65.13 Added boiler installation requirements
 - D. 65.14 Revised inspector commission requirements
 - E. 65.15 Initial boiler certification requirements were pulled out of a long paragraph
 - F. 65.26 Revised commission renewal and reinstatement requirements
 - G. 65.40 Revised Authorized Inspector commission card requirements
 - H. 65.50 Clarified enforcement of rules and code violations
 - I. 65.52 Clarified completion of required reports
 - J. 65.60 Revised external inspection requirements
 - K. 65.63 Revised extension intervals between internal inspections
 - L. 65.70 Revised Texas boiler numbers

AIA Procedure 9 Rev 6

EFFECTIVE DATES OF BOILER LAW AND RULES

Page 20 of 19

IVI.	65.81 – Revisea reporting requirements
N.	65.91 – Added overdue boiler inspection requirements
Ο.	65.101 – Revised board of boiler rules membership requirements
Р.	65.200 – Added cast aluminum boilers and test firing requirements
to	new boiler installations
Q.	65.206 – Revised care of boiler room requirements
R.	65.210 – Revised boiler inspection preparation requirements
S.	65.212 – Revised data nameplate restamping requirements
Т.	65.214 – Revised modular boiler requirements
U.	65.215 – Revised stacked boiler requirements
V.	65.217 – Revised variance requirements
W.	65.300 – Fees were completely restructured
X.	65.401 – Added late fee
Υ.	65.402 – Revised enforcement authority
Z .	65.601 – Revised general safety
AA.	65.602 – Added chimneys and vents
BB.	65.603 – Added requirements for boilers of a sealed combustion
design	
CC.	65.607 – Added requirements for high temperature boilers
DD.	65.611 – Removed lowering of the water level to test low water fuel
cu	toff devices for steam
heating	boilers; clarified language for gages installed on potable water heaters
EE.	65.612 – Added derating requirements to repairs and alterations;
and added material requirements for boilers tubes	
FF.	65.613 – Added maximum pressure test requirement

59. <u>February 15, 2016</u> – Added rules for plugging boiler tubes.

Approved:

Rob D. Troutt , Chief Inspector

May 5, 2016